



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,744	12/21/2001	Hiroshi Watanabe	P 290567 T4IA-01S1205-1	5292
909	7590	10/08/2003	EXAMINER	
PILLSBURY WINTHROP, LLP P.O. BOX 10500 MCLEAN, VA 22102			SCHLAK, DANIEL K	
			ART UNIT	PAPER NUMBER
			3653	

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/023,744

Applicant(s)

WATANABE ET AL.

Examiner

Daniel K Schlak

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Information Disclosure Statement***

The reference in the specification (page 4) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

Page 5, line 15: "allows" should be changed to "allowing".

Page 5, line 18: "accumulate" should be changed to "accumulating".

Page 5, line 20: "section" should be pluralized to recite "sections".

Page 5, line 25: "feed" should be changed to "fed".

Page 6, line 15: "feed" should be changed to "fed".

Page 6, line 16: "feed" should be changed to "fed".

Page 6, line 21: "allows" should be changed to "allowing".

Page 6, line 25: "accumulate" should be changed to "accumulating".

Page 6, line 27: "section" should be pluralized to recite "sections".

Page 7, line 2: "feed" should be changed to "fed".

Page 7, line 5: "feed" should be changed to "fed".

Page 27, line 3: "turn" should be changed to "turned".

Page 27, line 6: "sped" should be changed to "speed".

The Examiner is not a proof-reader. Surely most of the other pages have numerous errors as well. Applicant is required to go through and revise all minor grammatical errors following the above suggestions, and in response to any types of mistakes the Examiner has not caught.

Appropriate correction is required.

### ***Claim Objections***

Likewise, claims 1, 4, 5, 6, 9, and 10 require similar corrections and are objected to because of the following informalities:

Claim 1, line 6: please change "allows" to "allowing".

Art Unit: 3653

Claim 1, line 9: please change "for accumulate" to "for accumulating".

Claim 1, line 11: please change "section" to "sections".

Claim 1, line 14: please change "feed" to "fed".

Claim 1, line 16: please change "feed" to "fed".

Claim 4, line 5: please change "feed" to "fed".

Claim 5, line 5, please change "section" to "sections".

Claim 5, line 14: please change "feed" to "fed".

More examples of these grammatical errors are in claim 6, lines 12, 16, 18, 20, and 23, in claim 9, line 5, and in claim 10, lines 5, 9, and 14.

Further, please review all of the claimed subject matter to make any necessary changes to avoid similar mistakes which the Examiner has not noticed.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Both claims recite "the control amount obtained before a supply operation of the sheets...."

Art Unit: 3653

The recitation "the control amount" is without sufficient antecedent basis in both claims, as there has been no amount described, and no supply operation has been specified.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,641,156 to Nakuda et al. (hereafter referred to as "Nakuda").

Nakuda teaches supply section, feeding section, vaned wheel, and an accumulator. Nakuda teaches at least two detection sections (51a, 51b, 45) disposed at a predetermined interval in a feeding direction in a middle portion of said feeding section for detecting the sheets fed by the feeding section.

Nakuda teaches a measurement section configured to measure a passing time (see columns 7 and 8) of the sheets fed based on detection results of the detection sections.

Nakuda teaches a calculation section of the control configured to obtain a control amount of a rotational phase (the Examiner has underlined pertinent passages of

Art Unit: 3653

columns 7 and 8 in the attached copy of the reference to aid Applicant in understanding the nature of the rejection) of the vaned wheel from the measurement result.

Nakuda teaches a control section configured to control the rotation phase of the vaned wheel in accordance with the control amount obtained in the calculation section.

Nakuda's calculation section acquires tip-end passing times for the sheets and uses those times to do the calculation for obtaining the control amount.

The control section of Nakuda has a reference signal (see Fig. 9 and column 8) as a time reference. Nakuda obtains a deviation amount from the reference signal when the sheets are supplied and obtains the deviation amount of rotation of the vaned wheel with respect to the reference signal. Nakuda controls the rotation in accordance with the foregoing and establishes a synchronization between supply timing and the rotation phase of the sheets.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Nakuda as applied to claims 1 and 6, above, and further in light of JP 62-215459 to Sato.

Nakuda does not teach a plurality of coaxially disposed vaned wheels, two laterally spaced detectors, and control section configured to separately control the respective rotation phases of the two vaned wheels based on the measurement result of the measurement section.

Sato teaches these features, as shown in figure 2 and described in the reference. Sato's device is a well known feature for enhancing the ability of vaned wheel accumulators to accept skewed sheets. All incoming sheets to any vaned wheel accumulator will be skewed somewhat, and the extent to which the skewing is present and the amount of accuracy a designer wishes to achieve in the stacking provide the parameters by which it is determined whether or not to use Sato. Sato's device is applicable to any vaned wheel device of this type, and can be retrofit into an existing accumulator, as necessary.

The sheets entering the vaned wheel of Nakuda pass a sensor just before entry, the sensor utilized to affect minor, last minute adjustments to the wheel timing. This sensor could and would be modified to include the skew-correction device of Sato in the event where skewing was unacceptable or undesired, and the decision to do so after a bill has passed through a long conveyance, such as is shown in figure 4 of Nakuda, would only require routine skill in the art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



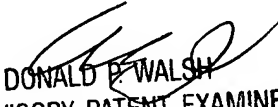
Art Unit: 3653

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K Schlak whose telephone number is 703-305-0885. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306 - 4173. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308 - 1113.

dk

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600